

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An electronic data management system which comprises a controller for executing a program stored in a memory while being connected to an input device for data input, storage units, a data reader for reading data regarding an encryption key and physical characteristics of an operator stored in a first recording medium, a medium verification device which stores an encryption key for verifying said first recording medium, and a physical characteristic data obtaining unit, wherein

said storage units comprise a first storage unit which stores an electronic data record file including electronic data, a second storage unit which stores a log file including log data representing an input or update log of the electronic data recorded on said electronic data record file, and a third storage unit which stores a physical characteristic data file which pre-stores data on physical characteristics of a certified operator,

said input device inputs electronic data to be recorded on said electronic data record file, and update data to update the recorded electronic data,

said medium verification device verifies whether said first recording medium from which said data reader has read data is a certified medium or not based on said encryption keys of both of said first recording medium and said medium verification device,

said controller executes the program stored in said memory to:

store log of the electronic data input from said input device in the log file;

store the electronic data input from said input device by affixing thereto an
electronic signature in the electronic data record file;

~~control said data reader to determine whether said first recording medium being~~
~~accessed by said data reader is a certified medium or not;~~

determine ~~whether that~~ said system is operated by a certified operator ~~based on a~~
~~comparison between~~ only when said medium verification device verifies
that said first recording medium is a certified medium, and all three of the
data on physical characteristics of an operator obtained by said physical
characteristic data obtaining unit, the data regarding the physical,
characteristics of an operator which said data reader has read from said
first recording medium, and the data on the physical characteristics stored
in said third storage unit, correspond to one another,

allow the operator to input the update data through said input device to update the
electronic data in the electronic data record file when said first recording
medium and the operator are certified;

update the electronic data in the electronic data record file by affixing thereto an
electronic signature in accordance with the update data input by said input
device; and

store log of the update data input by the input device in the log file.

2. (Original) The system according to claim 1, wherein said second storage unit is detachably connected to said system.

3. (Original) The system according to claim 1, wherein said first recording medium is detachably connected to said data reader.

4. (Previously Presented) The system according to claim 1, wherein,
said first recording medium stores predetermined encryption keys, and
said system further comprises a medium verification unit which stores predetermined encryption keys, collaborates with said data reader to perform medium verification by challenge-response by using its own encryption key and an encryption key read from said first recording medium, and informs said controller of the verification results.

5. (Original) The system according to claim 1, wherein said controller encrypts the log of the electronic data input by said input device with the predetermined encryption key, and stores the encrypted data in the log file.

6. (Previously Presented) The system according to claim 5, wherein said controller decodes the encrypted log of the input electronic data stored in the log file by using a predetermined decode key when said controller certifies said first recording medium and the operator, and

said system further comprises an output device which outputs the log of the input electronic data decoded by said controller.

7. (Original) The system according to claim 6, wherein said input device inputs the update data in accordance with the log of the input electronic data output by said output device.

8. (Original) The system according to claim 1, wherein said input device also inputs verification information representing an operator who inputs the electronic data or the update data, and

said controller associates the verification information input by said input device with the input or updated electronic data before storing the electronic data in the electronic data record file.

9. (Canceled).

10. (Canceled).

11. (Previously Presented) The system according to claim 1, wherein said controller acts as said user verification unit by executing a program stored in said memory.

12. (Original) The system according to claim 1, wherein said controller stores the electronic data stored by said input device in the electronic data record file immediately after the data input.

13. (Original) The system according to claim 1, wherein said controller stores the electronic data in the electronic data record file based on the log of the electronic data stored in the log file when said controller certifies said first recording medium and the operator.

14. (Original) The system according to claim 1 further comprising a second data reader which reads data stored in a detachable second recording medium, wherein
said controller allows said input device to input the electronic data when said controller certifies said second recording medium based on the data read by said second data reader.

15. (Previously Presented) The system according to claim 1, wherein the electronic data record file stores electronic account data, and
the electronic data and the update data include information regarding to transactions and information for updating the transaction information to be recorded on the electronic account.

16. (Currently Amended) An electronic data management system comprising:
data input means for inputting electronic data;

electronic data recording means for recording information input by said data input means by affixing thereto an electronic signature;

medium reading means for reading data regarding an encryption key and physical characteristics of an operator stored in a detachable recording medium;

medium verification means for verifying ~~a detachable~~ said recording medium when said recording medium is applied to said medium verification means, based on an encryption key pre-stored in said medium verification means and the encryption key read by said medium reading means;

physical characteristic data storage means for pre-storing data relating to physical characteristics of a certified operator;

physical characteristic data obtaining means for obtaining data relating to physical characteristics of a certified operator;

user verification means for determining ~~whether that~~ that an operator is certified ~~based on a comparison between~~, when all three of the data relating to the physical characteristics of the operator obtained by said physical characteristic data obtaining means, the data regarding the physical characteristics of an operator which said medium reading means has read from said recording medium, and the data relating to the physical characteristics stored in said physical characteristic data storage means correspond to one another;

access authorization means for authorizing input of update data for updating the electronic data recorded on said electronic data recording means, when said medium verification means verifies said recording medium and said user verification means verifies the operator;

update data input means for inputting the update data when said access authorization means authorizes input of the update data;

data update means for updating the electronic data stored in said electronic data recording means by affixing thereto an electronic signature in accordance with the update data input by said update data input means; and

log management means for recording log of the electronic data input by said data input means and log of the update data input by said update data input means.

17. (Original) The system according to claim 16 further comprising electronic data output means for outputting the log of the electronic data recorded on said log management means when said access authorization means authorizes the update data input,

wherein said update data input means inputs the update data in accordance with the electronic data output by said electronic data output means.

18. (Original) The system according to claim 16, wherein said data input means also inputs verification information representing who inputs the electronic data,

said update data input means also inputs verification information representing who inputs the update data, and

said electronic data recording means associates the verification information representing who inputs the electronic data or the update data with the input electronic data or updated electronic data before recording the electronic data.

19. (Currently Amended) A method of managing electronic data which is applicable to a system comprising an electronic data record file for recording electronic data, and a log file for recording log of input or update of the electronic data to be recorded on the electronic data record file, said method comprising:

inputting the electronic data to be recorded on the electronic data record file;

storing log of the input electronic data in the log-file;

recording the input electronic data by affixing thereto an electronic signature on the electronic data record file;

reading data regarding an encryption key and physical characteristics of an operator stored in a detachable recording medium;

discriminating whether a detachable said recording medium is certified when said recording medium is applied to said system, based on a pre-stored encryption key and the encryption key read from said recording medium;

obtaining data relating to physical characteristics of an operator, and

discriminating whether that a certified operator operates said system-or not by obtaining data relating to physical characteristics of an operator and comparing when all three of the obtained data relating to the physical characteristics of an operator, with the pre-stored data relating to physical characteristics of the certified operator, and the data regarding the physical characteristics of an operator read from said recording medium correspond to one another;

permitting input of update data for updating the electronic data recorded on the electronic data record file when the recording medium and the operator are certified;

inputting the update data after the permission;

updating the electronic data in the electronic data record file by affixing thereto an electronic signature in accordance with the input update data; and

storing log of the input update data in the log file.

20. (Previously Presented) The method according to claim 19, wherein said permitting input of update data outputs the log of the input electronic data stored in the log file, and

the update data are input in accordance with the output electronic data.

21. (Previously Presented) The method according to claim 19 further comprising encrypting log of the input electronic data and the update data when storing the log of the input electronic data or the log of the input update data in the log file.

22. (Previously Presented) The method according to claim 21 further comprising decoding the log of the input electronic stored in the log file when the recording medium and the operator are certified, and outputting the decoded log data.

23. (Original) The method according to claim 19, wherein said inputting the electronic data also inputs verification information representing who input the electronic data, said inputting the update data also inputs verification information representing who inputs the update data, said recording the electronic data on the electronic data record file associates the verification information representing who inputs the electronic data with the electronic data before recording the electronic data on the electronic data record file, and said recording the update data on the electronic data file associates the verification information representing who inputs the update data before recording the update data on the electronic data record file.

24. (Original) The method according to claim 19, wherein said discriminating the certified operator compares data representing physical characteristics of an operator with previously stored data representing physical characteristics of the certified operator.

25. (Original) The method according to claim 19, wherein said recording the electronic data on the electronic data record file records the electronic data immediately after said inputting the electronic data inputs the electronic data.

26. (Original) The method according to claim 19, wherein said recording the electronic data records the electronic data on the electronic data record file when said discriminations certify said recording medium and the operator.

27. (Currently Amended) A computer readable recording medium storing a program which causes a computer system comprising an electronic data record file for recording electronic data and a log file for storing log of input or updated electronic data to be recorded on the electronic data record file, said program comprising the steps of:

inputting the electronic data to be recorded on the electronic data record storing log of the input electronic data in the log file;

storing log of the input electronic data in the log-file;

recording the input electronic data by affixing thereto an electronic signature on the electronic data record file;

reading data regarding an encryption key and physical characteristics of an operator stored in a detachable recording medium;

discriminating whether ~~a detachable~~ said recording medium is certified when said recording medium is applied to said system, based on a pre-stored encryption key and the encryption key read from said recording medium;

obtaining data relating to physical characteristics of an operator, and discriminatingg
~~whether that a certified operator operates said system or not by obtaining data relating to~~
~~physical characteristics of an operator and comparing~~ when all three of the obtained data relating

to the physical characteristics of an operator, with the pre-stored data relating to physical characteristics of the certified operator, and the data regarding the physical characteristics of an operator read from said recording medium correspond to one another;

permitting input of update data for updating the electronic data recorded on the electronic data record file when the recording medium and the operator are certified;

inputting the update data after the permission;

updating the electronic data in the electronic data record file by affixing thereto an electronic signature in accordance with the input update data; and

storing log of the input update data in the log file.

28. (Original) The recording medium according to claim 27, wherein said electronic data input step also inputs verification information representing who inputs the electronic data;

said update data input step also inputs verification information representing who inputs the update data;

said electronic data recording step associates the electronic data with the verification information representing who inputs the electronic data before recording the electronic data on the electronic data record file; and

said update data recording step associates the update data with the verification information representing who inputs the update data before recording the update data on the electronic data record file.

29. (Currently Amended) A program data signal being embedded in a carrier wave, which represents a program for causing a computer system comprising an electronic data record file for recording electronic data and a log file for recording input or update log of the electronic data to be recorded on the electronic data record file, said program data signal comprising:

a segment for inputting the electronic data to be recorded on the electronic data record file;

a segment for recording log of the input electronic data on the log file;

a segment for recording the input electronic data by affixing thereto an electronic signature on the electronic data record file;

a segment for reading data regarding an encryption key and physical characteristics of an operator stored in a detachable recording medium;

a segment for discriminating whether ~~a detachable~~ said recording medium is certified when said recording medium is applied to said computer system, based on a pre-stored encryption key and the encryption key read from said recording medium;

a segment for obtaining data relating to physical characteristics of an operator, and discriminating whether that an operator is a certified operator or not by obtaining data relating to physical characteristics of the operator and comparing when all three of the obtained data relating to the physical characteristics of an operator, with the pre-stored data relating to physical characteristics of the certified operator, and the data regarding the physical characteristics of an operator read from said recording medium correspond to one another;

a segment for permitting input of update data for updating the electronic data recorded on the electronic data record file when said recording medium and the operator are certified;

a segment for inputting the update data when the update data input is permitted;

a segment for updating the electronic data recorded on the electronic data record file by affixing thereto an electronic signature in accordance with the input update data; and

a segment for storing log of the input update data in the log file.

30. (Original) The program data signal according to claim 29, wherein said electronic data input segment also inputs verification information representing who inputs the electronic data,

said update data input segment also inputs verification information representing who inputs the update data,

said electronic data recording segment associates the verification information representing who inputs the electronic data with the electronic data before recording the electronic data on the electronic data record file, and

said update data recording segment associates the verification information representing who inputs the update data before recording the update data on the electronic data record file.